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ABSTRACT

An exam analysis procedure was developed at Loma Linda University School of Nursing to help students who do poorly on tests identify problem areas. Using the student's exam paper, the student and instructor discuss each incorrectly answered question, and record the problem on a check sheet. The procedure makes it possible to identify how many questions were missed due to lack of knowledge (or retention) of the subject matter as compared to the number of questions missed due to poor exam techniques. Weak understandings of specific concepts and content areas can also be identified. The instructor can then make recommendations that will help the student strengthen specific exam skills, study habits, concepts, or content areas. Included are objective exam analysis work sheets for four anonymous students, along with suggested interventions. A summary of exam techniques for multiple choice questions is also provided. A chart indicates factors that might contribute to the problem, type of assessment needed, and possible interventions for the following types of problems: lack of knowledge of subject matter, inadequate English language skills, exam panic, and eight types of poor exam skills, including failure to identify key words, failure to consider each option carefully, and changing answers. (SW)

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LLUSN-LAP - #047

LOMA LINDA UNIVERSITY SCHOOL OF NURSING
LEARNING ASSISTANCE PROGRAM

Exam Analysis

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The exam analysis was developed by the LLUSN LAP staff to help students who do poorly on examinations identify problem areas. Using the student's exam paper, the student and instructor discuss each question that was answered incorrectly in order to identify and record why the student failed to choose the correct answer.

In this way it is possible to identify how many questions were missed due to lack of knowledge (or retention of information) of the subject matter as compared to the number of questions missed due to use of poor exam techniques (failure to identify key words, failure to consider each option carefully, changing answers etc.). Weak understandings of specific concepts and content areas can also be identified.

The instructor can then make recommendations that will help the student strengthen specific exam skills, study habits, concepts or content areas.

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HE 019 610

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EXAM ANALYSIS PROCEDURE

A Learning Assistance Program (LAP) for nursing students at Loma Linda University was started in 1982. One of the first problems that we encountered was how to help the intelligent, hardworking student who has difficulty passing exams. We found that this is a question that has been asked by other educators.

Pheobe Helm of Triton Community College describes the problem as follows:

"Many students seem to have good study habits, acquire information rather easily, and perform well in class discussions and clinical situations, and yet score lower on multiple choice tests than their general performance as students would indicate. Students in health sciences and professional schools who may be facing for the first time, situational types of questions designed to measure application of information to practice, seem to be particularly plagued by the problem. In discussing this problem with students as well as their instructors, one often hears evidence of feelings of frustration, lack of control and despair" (Helm "Recall..." p. 143).

Marie came in to the LAP office to ask for help with her study skills. She was failing her exams in Critical Care Nursing. As we discussed time management it became apparent that she was studying more than three hours for each lecture hour. It took her a long time to read her assignments but she kept up to date. Therefore study time was not the problem.

Marie showed us the notes taken during lectures. Although she had difficulty getting complete notes during lectures, (because of her French-speaking background) she had made arrangements to share notes with a

classmate. Marie had good notes from which to study; therefore, lecture notes were not the problem.

Marie's instructor came to conference with the LAP staff. She was trying to help Marie by tutoring her in difficult content areas. The instructor was frustrated because she felt that Marie understood the concepts well and was able to apply them to her patient care; yet she was failing the course.

The LAP staff did some brainstorming about possible problems and potential interventions. We decided to collect some data to help us identify the problems Marie was having in being successful on exams. Marie's instructor volunteered her help.

The instructor and Marie together went over every question marked wrong on Marie's exam. They wrote down the reason why each item was missed. They found that Marie had not attempted to answer more than 20 percent of the questions due to lack of time. Marie explained that she always translated each question into French before answering it and then she translated her answer from French to English. She had also calculated some dosage problems incorrectly and did not understand the meaning of several questions due to lack of English vocabulary.

Marie's instructor decided to give Marie extra time to complete her examinations so she would have a more accurate measurement of her knowledge. The LAP staff set up math tutoring and encouraged Marie to make flash cards of unfamiliar vocabulary terms. We worked with Marie to improve her exam-taking skills. She was encouraged to ask for clarification if she didn't understand a question or answer option.

Our strategies were successful. Marie got a B on her final exam. This was enough to give her a passing grade in the course. Marie worked hard to improve her vocabulary and reading comprehension and speed. We practiced with multiple

choice questions. Finally she was able to complete her examinations in the usual time frame without having to translate the questions and answers.

Marie's success encouraged the LAP staff to work with other students who were having difficulty doing well on examinations. Frequently these students have complained that they have studied hard for an exam and felt that they really knew the material well, yet they did poorly on the examination. We decided to review the literature to see what was being done to help students in this area.

The Review of Literature

The review of literature focused on finding methods to analyze what problems cause students to do poorly on multiple choice examinations in college classes. Factors related to poor exam performance included: inadequate knowledge of the subject matter, minority group background, English language deficit, extreme test anxiety and ineffective exam-taking skills.

The item analysis is "an examination of a pattern of responses for each item in order to assess its effectiveness" (Gay p. 263). This procedure is used widely and has become a standard practice in the analysis of teacher-made exams. The item analysis is used to improve exam questions, to identify areas where learning has been ineffective and to clarify misconceptions during post-examination classroom discussions (Gay p. 263-269; Gronlund p. 253-267; Nimmer p. 138; and Thorndike p. 135-156).

The need for student input in the evaluation of examinations is recognized. Secolsky p. 53-55; Simpson and Cohen p. 8; and Young p. 6 Section I). Contributing factors and interventions for poor exam performance in minority and ESL students, in students who experience extreme test anxiety, and in students who have poor exam-taking skills were discussed.

Frierson stressed the importance of "helping students diagnose and correct problems of test-taking" so that their performance on examinations will "accurately reflect their acquired knowledge" (Frierson "Enhancing ..." p. 4). However, no literature was located which discussed methods for analysis or diagnosis of individual students problems related to poor performance on teacher-made examinations.

Development of the Exam Analysis Method

Our requests for exam analysis increased rapidly as students and faculty heard of the help it provided. We analyzed the reasons why students answered questions incorrectly. These reasons were recorded on a checklist. This list was later organized into a worksheet where specific problems and contributing factors were categorized under general headings.

An exam analysis assessment and intervention protocol was developed. The purpose of this protocol was to help faculty assess each problem area and to give suggestions for interventions which have proven useful. With the development of these tools it is possible for any instructor to do exam analysis and to set up an effective program of intervention for his own students.

The Exam Analysis Procedure

The exam analysis is a diagnostic and perscriptive procedure. The student and an instructor identify why the student missed specific questions on an examination. They plan strategies to improve the student's exam taking performance.

The following steps make up the exam analysis procedure:

1. The students and instructor become aware that the student has a problem with taking exams
2. The student requests an exam analysis

3. The student and the faculty member who is doing the analysis, discuss the LAP Summary of Exam Techniques (See handouts)
4. The student and faculty member go over each question which the student missed on the exam. The student uses the exam techniques to answer these questions (The student does not look at his former answer or at the correct answer on the answer key)
5. The student and faculty member identify the main category and specific problem or contributing factor for why the student missed each question
6. The faculty member records why each item was missed on the exam analysis worksheet
7. The faculty member totals the number of items missed, the percentages for each specific problem and each main category
8. Suggested interventions are discussed with the student and written on the back of the exam analysis worksheet
9. A copy of the exam analysis is given to the student, another to the referring instructor, and a third is retained in the student's record
10. Follow-up appointments (or referrals) for help with exam skills, tutoring, counseling and further evaluation are made.

The exam analysis procedure teaches students to use certain exam techniques. (See Summary of LAP Exam Techniques included in your handouts). These are known by our students as "the Exam ABC's" because we teach them to use steps A, B and C for every question on a multiple choice exam or quiz. The Summary of Exam Techniques is a compilation of exam techniques advocated by such experts as Christ, Helm, Raygor, Wark, and others. We selected the techniques which had proven most useful to our students to be included in the summary.

Case Studies

In your handouts you will find four completed Exam Analysis. We have chosen one fairly typical problem from each of the main categories of potential causes for students' poor exam performance. These categories are: inadequate knowledge of content, language related problems, test anxiety, ineffective exam-taking skills and other problems.

A. Lack of Knowledge of Subject Matter

Lack of knowledge of subject matter is one of the main reasons students do poorly on exams. Lack of knowledge may be caused by: inadequate reading of assignments, poor notetaking on lectures, inability to apply concepts, poor retention and others.

Case Study #1: Lack of Knowledge Related to Poor Retention of Information

Allen, a freshman nursing student, was referred to LAP for help after he failed Fundamentals of Nursing. The exam analysis on his final showed that 57% of the questions Allen answered incorrectly were due to lack of knowledge related to poor retention of information, 36% of the questions were missed due to changing answers from right to wrong; seven percent were missed due to carelessness in reading the questions.

Allen had been working 32 hours per week in addition to taking a full academic load. After discussing good study-time management with the LAP staff, he decided to work less so he could plan a good study and review schedule. He was able to stop changing his answers unless he knew the reason why his first choice was wrong. Following the "Exam A.B.C." steps helped him to read the questions more carefully. Allen's final grade when he repeated Fundamentals of

Nursing was a B+. He has improved his study schedule and exam skills over the past year so that he consistently has above average grades.

B. English Language Skills

Students who use English as their second language may experience problems on exams with reading comprehension and speed, vocabulary, and other problems including notetaking. The cultural differences of minority students and unfamiliarity with multiple choice and problem-solving questions also influence their exam performance. (Aquino p. 111-113, "The Testing Issue" p. 3-6; and Ivie p. 170). Suggested interventions include improving educational opportunities, tutoring in weak content areas, improving study and exam skills, and practice with simulated tests (Frierson, "Enhancing.." p. 3-9; "The Testing Issue," p. 3-21 and Ivie p. 171-175).

Case Study #2: Lack of knowledge related to inadequate notetaking during class lectures

Jill's nursing instructor requested an exam analysis on Jill's first O.B. exam. Jill was a student from the far east who experienced difficulty with the use of the English language. Jill's exam analysis showed that 73 percent of the questions missed were due to lack of knowledge of the subject matter related to inadequate notemaking skills. Twenty-seven percent of the questions missed were due to failure to understand the question or answer option. Both of these problems were related to her lack of English language skills due to her English as a second language background.

Since it would take some time for Jill to improve her English language skills, the LAP staff suggested notesharing and tutoring within a small study group. Group participation would give Jill the

opportunity to discuss important concepts with other students. This would help to correct any misconceptions she might have if she didn't understand part of her lecture or reading assignment. We also encouraged Jill to ask the instructor to restate or clarify any question or answer option she found difficult to understand. She was referred for intensive work in vocabulary, reading comprehension, English conversation and writing during the summer.

With notesharing, participation in a study group, tutoring, some hard study (both in specific course content and to improve her English language skills) Jill has managed to pass all of her nursing classes in the past year. As her English language skills increased she was able to take better notes on classroom lectures.

C. Exam Anxiety

Extreme anxiety or exam panic has a negative effect on exam performance. It results in irrelevant, non-productive thoughts. Inability to focus on the question, to remember, and to think logically are symptoms of exam panic. (Anderson and Helmic p. 133-141; Helm, "Recall..." p. 145; and Kirkland and Hollandsworth p. 431). Students experiencing exam anxiety may also forget to use the exam techniques they have learned.

Effective test anxiety interventions include thorough preparation in the content area; training in exam techniques; self instruction to stay "on task", relaxation techniques and practice with similar questions. Helm developed a successful step-by-step procedure for answering multiple choice questions which focuses the students' attention on answering the exam question and away from irrelevant thoughts (Helm, "Recall..." p. 145).

Case Study #3: Decreased Concentration and Problem Solving Ability Related to Test Anxiety

Terry was in despair because she had gotten a D on her first exam in Critical Care Nursing. She stated that she had studied carefully and felt she really understood the concepts well. During the exam she had experienced extreme anxiety. She was unable to concentrate or to think the questions through in a logical way.

Terry's exam analysis showed that 60% of the questions she missed were due to low concentration related to test anxiety. Terry had no difficulty answering all of these questions correctly during the exam analysis. Forty percent of the questions marked wrong were related to poor retention of information.

Suggested interventions for Terry focused on following the "Exam A.B.C.'s" step-by-step on every exam question. Peer tutoring, study group involvement, notesharing and frequent review were suggested to improve retention of information.

Terry followed the interventions carefully. She was really excited when she got the second highest grade in the class on the next exam and passed the course with a high B.

D. Test-taking Techniques

Students who have learned effective test-taking techniques do better than their peers on examinations (Brozo et al, p. 3). Specific items listed as good exam skills vary from author to author but generally include: effective use of time, following directions carefully, focusing on key words, analyzing items and answer options carefully, generating an answer before choosing a multiple choice response and test-wise guessing strategies (Christ and Adams, p.

143-169; Frierson "Assessing...", p. 6; Flynn and Anderson, p. 33-34; Helm, Recall..." p. 143; Sarnacki, p. 211; Schmidt and Crocker, p. 5). In a study using 43 teacher-made examinations from two colleges and three universities, Brozo found that forty-four percent of the items contained test-wiseness clues (Brozo, p. 6). Improved performance on both standardized and teacher-made examinations resulted when medical students were given instructions in test-taking techniques (Frierson "Assessing...", p. 8; Frierson "Evaluation...", p. 9-10; Sarnacki, p. 207-220).

Specific problems which students who are unskilled in taking exams often experience are: failure to focus on what the question is asking, failure to consider each answer option carefully, unwise use of exam time, changing answers, carelessness, clerical errors, and others.

Case Study #4: Inability to apply knowledge due to use of poor exam techniques.

Dona came in for an exam analysis after failing her first two exams in medical-surgical nursing. She felt as if it was impossible for her to pass the course. Her instructor told her that if she got a B on the final exam she would pass. Dona had been attending a med-surg study group and a tutoring session every week since she had failed the first exam. She felt that she really understood the material yet she had failed the second exam and so she was apprehensive.

Dona's exam analysis showed that 61% of the questions missed were due to use of poor exam skills (29% failure to consider each option carefully and 16% failure to focus on what the question was

asking/noting key words etc.). Thirty-nine percent of the questions Dona missed were related to poor retention of information.

Our suggested interventions focused on helping Dona learn to use good exam skills. We practiced the exam A.B.C's on many different review questions. It was apparent while working with these questions that Dona understood the concepts well. She started the review for her final exam early, attending study group review sessions. She reviewed her previous exams in the course in preparation for her final.

The evening after she had completed her exams Dona called me at home. She had gotten a B on her final exam and had passed the course with a grade of C. Learning how to use effective exam techniques had made the difference between passing and failing for Dona! If she had not come in for an exam analysis she would not have been able to identify her problems.

Exam Analysis Benefits to Students

An important benefit of the exam analysis is that it forces students to take responsibility for their own learning. A group of angry students from another school came to the LAP office complaining about an "unfair" test they had taken. Their instructor sent their tests over for an exam analysis. Each student marked her own exam analysis worksheet. When the analysis was finished all of the students had marked many problems in the lack of knowledge category. For the first time they realized that the problem was that they had tried to memorize material that they didn't really understand. It is difficult to remember and almost impossible to apply concepts that are not well understood to questions based on clinical situations. By

doing the exam analysis these students learned to take responsibility for their own learning instead of blaming the instructor for their poor exam scores.

We have discussed a number of benefits which individual students have received from the Exam Analysis. These include identifying problems, causes, contributing factors and planning interventions for students who do poorly on examinations. These interventions frequently include learning how to improve study and exam skills; and providing tutoring in weak content areas. Improved performance improves self-confidence and increases motivation to learn.

Summary and Conclusions

The exam analysis was developed at Loma Linda University to help students identify why they do poorly on examinations. The student and an instructor analyze each question that is marked wrong, recording the problem on a check sheet. Results are tallied, categorized and recorded as percentages; appropriate interventions are planned.

The exam analysis can be used by any instructor to analyze reasons why a student did poorly on an examination. The time needed to complete the process is usually one to two hours.

In the past four years the LAP staff has done over 250 exam analysis. Individual instructors have used the exam analysis with their own students. We have shared our experience with faculty from other schools. Nursing students from other schools are frequently referred to Loma Linda University for help in this area.

The exam analysis has become popular with our nursing students. In evaluating the help they receive from the exam analysis, students frequently include: knowing what is wrong and what to do about it, identifying weak study

skills, improving exam skills, tutoring in weak content areas, increased self confidence and improved motivation. Many students have told us that they feel that having an exam analysis and following through with the suggested interventions has made the difference between passing or failing a major nursing course.

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Loma Linda University
School of Nursing

LAP #044

LOMA LINDA UNIVERSITY SCHOOL OF NURSING
Learning Assistance Program
Objective Exam Analysis Worksheet

Student: A Course: N102 Exam: #1

Grade: D Date: Spring 1985

	Test Item Missed	Lack of Knowledge: Reading/Textbook	Lack of Knowledge: Inadequate Notes	Lack of Knowledge: Application of Knowledge	Lack of Knowledge: Poor Retention	Lack of Knowledge: Other	English Skills: Reading Comprehension	English Skills: Reading Speed	English Skills: Vocabulary	English Skills: Other	Exam Panic: Decreased Concentration	Exam Panic: Mental Block	Exam Panic: Forgot to Use Exam Techniques	Exam Panic: Other	Exam Skills: Did Not Focus on What Question Asked	Exam Skills: Failed to Consider Options Carefully (True, False, ?,etc)	Exam Skills: Poor Use of Time	Exam Skills: Changed Answer	Exam Skills: Other	Other: Math	Other: Carelessness/Clerical Error	Other: Other	Other: Other
A.	7																	X					
	8				X																		
	16				X																		
	20				X																		
	27				X																		
	28																				X		
	31				X																		
B	3				X																		
	6																	X					
	16																	X					
	17				X																		
	20																	X					
	21				X																		
C	1																	X					
Items					8												5				1		
%					57												36				7		
% Totals					57%												36%				7%		

LAP Suggestions

A. poor retention
1. frequent review
-day of lecture
-weekly review
2. pre exam schedule

B. Exam Skills
1. don't change answers unless you know why
2. read carefully
-note key words
-answer question yourself

Analysis Results:

16 jmc

(over)

LAP #044

LOMA LINDA UNIVERSITY SCHOOL OF NURSING
Learning Assistance Program
Objective Exam Analysis Worksheet

Student: B Course: O.B. Exam: #1

Grade: C- Date: Winter 1984

	Test Item Missed	Lack of Knowledge: Reading/Textbook	Lack of Knowledge: Inadequate Notes	Lack of Knowledge: Application of Knowledge	Lack of Knowledge: Poor Retention	Lack of Knowledge: Other	English Skills: Reading Comprehension	English Skills: Reading Speed	English Skills: Vocabulary	English Skills: Other Inadequate notes	Exam Panic: Decreased Concentration	Exam Panic: Mental Block	Exam Panic: Forgot to Use Exam Techniques	Exam Panic: Other	Exam Skills: Did Not Focus on What Question Asked	Exam Skills: Failed to Consider Options Carefully (True, False, ?,etc)	Exam Skills: Poor Use of Time	Exam Skills: Changed Answer	Exam Skills: Other	Other: Math	Other: Carelessness/Clerical Error	Other: Other	Other: Other	COMMENTS AND OTHER INFORMATION
																								Exam Analysis Results
																								A. 73% missed due to poor lecture notes
																								B. 27% missed due to poor reading comprehension of ESL student (20% related to English vocabulary)
A	9						X	*																misunderstood textbook
	11						X	*																didn't understand answer option
	13						X	*																didn't understand answer option
	20									X														notes incomplete
	25						X																	misunderstood text
B	3									X														lecture notes inadequete
	5									X														lecture notes incomplete
	7									X														lecture notes incorrect
	9									X														not in notes
	20									X														lecture notes incomplete
	21									X														inadequete notes
	27				X					X														forgot formula
	28									X														wrong information in notes
	29									X														wrong information in notes
	30									X														wrong information in notes
																								LAP Suggestions
																								A. -notesharing with peer tutor
																								-vocabulary flashcards
																								B. -Tutoring to understanding of concepts
																								-ask for clarification when you don't understand
Items							4			11														Analysis Results:
%							27			73														
% Totals							100%																	17 vme

(over)

LAP #044

LOMA LINDA UNIVERSITY SCHOOL OF NURSING
Learning Assistance Program
Objective Exam Analysis Worksheet

Student: C Course: Critical Care Exam: #1

Grade: D Date: Fall 1984

	Test Item Missed	Lack of Knowledge: Reading/Textbook	Lack of Knowledge: Inadequate Notes	Lack of Knowledge: Application of Knowledge	Lack of Knowledge: Poor Retention	Lack of Knowledge: Other	English Skills: Reading Comprehension	English Skills: Reading Speed	English Skills: Vocabulary	English Skills: Other	Exam Panic: Decreased Concentration	Exam Panic: Mental Block	Exam Panic: Forgot to Use Exam Techniques	Exam Panic: Other	Exam Skills: Did Not Focus on What Question Asked	Exam Skills: Failed to Consider Options Carefully (True, False, ?,etc)	Exam Skills: Poor Use of Time	Exam Skills: Changed Answer	Exam Skills: Other	Other: Math	Other: Carelessness/Clerical Error	Other: Other	Other: Other	COMMENTS AND OTHER INFORMATION
																								Exam Analyxix Results
																								A. 60% missed due to inability to concentrate / use exam skills related to test anxiety
																								B. 40% missed due to lack of knowledge/retention
A	2	X																						
	3												X											
	6	X																						blood gases
	7												X											
	13										X													
	17				X																			acidosis
	18												X											
	21				X																			
	23										X													
	29										X													
	30												X											
	31													X										failed to not "except"
	33										X													
	34												X											
	35				X																			review chest tubes
B	1										X													
	2	X																						
	5				X																			chest tubes
	7				X																			review water seal drainage
	16												X											Knew answer
	19				X																			
	25												X											knew answer
	28				X																			medication
	29										X													knew answer
	31										X													
Items		3			7						7		7	1										Analysis Results:
%		12			28						28		28	4										
% Totals		10/25 40%									15/25 60%													

18 vmc

(over)

Student C

SUGGESTED INTERVENTIONS

A. Test Anxiety

1. Follow summary of exam techniques steps a b c on every question
   a. Focus on what question is asking
      underline key words
      generate & jot down own pool of answers
   b. Consider each answer option carefully
      note key words
      write true, false, etc. by every answer option
      eliminate false options
   c. choose best answer based on what is asked in the question and what you learned in this class.
2. Assess need for referral for counseling regarding test anxiety
3. Listen to strategies for succes on nursing exams
4. Practice relaxation techniques

B. Retention of Information

1. Peer tutoring - discuss important concepts to encrease understanding
2. Notesharing with tutor or study group
3. Frequent review to ensure thorough preparation in content area

C. Exam Techniques

1. Practice using exam techniques steps a, b, c, on review questions, quizzes etc.

Vme

LAP #044

LOMA LINDA UNIVERSITY SCHOOL OF NURSING
Learning Assistance Program
Objective Exam Analysis Worksheet

Student: D Course: Med-Surg. Exam: #2

Grade: 69% Date: 6/5/86

	Test Item Missed	Lack of Knowledge: Reading/Textbook	Lack of Knowledge: Inadequate Notes	Lack of Knowledge: Application of Knowledge	Lack of Knowledge: Poor Retention	Lack of Knowledge: Other	English Skills: Reading Comprehension	English Skills: Reading Speed	English Skills: Vocabulary	English Skills: Other	Exam Panic: Decreased Concentration	Exam Panic: Mental Block	Exam Panic: Forgot to Use Exam Techniques	Exam Panic: Other	Exam Skills: Did Not Focus on What Question Asked	Exam Skills: Failed to Consider Options Carefully (True, False, ?, etc)	Exam Skills: Poor Use of Time	Exam Skills: Changed Answer	Exam Skills: Other	Other: Math	Other: Carelessness/Clerical Error	Other: Other	Other: Other	COMMENTS AND OTHER INFORMATION
A	1				X																			Diet
	2				X																			Medication
	4															X								Need to T. F.? (knew answer)
	6																		X					Need to ask for clarification
	12																		X					Did not read carefully
	13				X																			
	14														X									Did not note key word
	16														X									Need to formulate own answer
	19																X							Need to T. F.?
	24														X									Failed to note key word
	28															X								Need to T. F.?
	30															X								Need to T. F.?
	31				X																			Review Aphasia - pathophysiology
	33				½											½								Needed to T. F.? ask for clarification
B	4				X																			Review Parkinsonism
	6															X								Needed to T. F.?
	16																		X					Practice "except" questions
	20				X																			Medication
	22				X																			Medication
Items					7½										3	5½			3					
%					39										16	29			16					
% Totals				39%											61%									

Analysis Results:

A. 61% missed due to exam skills

B. 39% missed due to poor retention/lack of knowledge

20 v/mc

(over)

Student D

LAP SUGGESTIONS

A. Exam Skills

1. Discuss summary of exam skills
2. Practice exam skills on exam questions, quizzes, and review book questions
   a. Be sure to note key words
      Formulate your own answer
   b. Write T, F,? etc. by every answer options
      Ask for clarification if you don't understand a question or answer option.
3. Listen to "Strategies for Success on Nursing Exams"
4. Attend exam workshop

B. Retention of Information

1. Study schedule
   -Read assigment before lecture
   -Review lecture notes same day and at end of week
   -Begin review for final exam early
2. Study Group
   -Discuss important concepts with classmates in study group to increase understanding and retention
   -Attend review session before final
3. Review sectional exams before the final
4. Review quizzes before final

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LOMA LINDA UNIVERSITY SCHOOL OF NURSING
LEARNING ASSISTANCE PROGRAM
The Exam Analysis Procedure

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The following steps make up the exam analysis procedure:

1. The students and instructor become aware that the students has a problem with taking exams

2. The student requests an exam analysis

3. The student and the faculty member who is doing the analysis, discuss the LAP Summary of Exam Techniques

4. The student and faculty member go over each question which the student missed on the exam. The student uses the exam techniques to answer these questions (The student does not look at his former answer or at the correct answer on the answer key)

5. The student and faculty member identify the main category and specific problem or contributing factor for why the student missed each question

6. The faculty member records why each item was missed on the exam analysis worksheet

7. The faculty member totals the number of items missed, the percentages for each specific problem and each main category

8. Suggested interventions are discussed with the student and written on the back of the exam analysis worksheet

9. A copy of the exam analysis is given to the student, another to the referring instructor, and a third is retained in the student's record

10. Follow-up appointments (or referrals) for help with exam skills, tutoring, counseling and evaluation of progress are made.

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LAP #044

LOMA LINDA UNIVERSITY SCHOOL OF NURSING
Learning Assistance Program
Objective Exam Analysis Worksheet

Student_____ Course_____ Exam_____

Grade_____ Date_____

	Lack of Knowledge						English Skills					Exam Panic					Exam Skills							Other		ANALYSIS RESULTS
Test Item Missed	Reading/Textbook	Inadequate Notes	Application of Knowledge	Poor Retention	Other_____		Reading Comprehension	Reading Speed	Vocabulary	Other_____		Decreased Concentration	Mental Block	Forgot to Use Exam Techniques	Other_____		Did Not Focus on What Question Asked		Failed to Consider Options Carefully (True, False, ?, etc.)	Poor Use of Time	Changed Answer	Carelessness/Clerical Error	Other_____		Math	Other_____	
Items																											
%																											
% Totals																											

(over)

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#LLUSN-LAP - #046

LOMA LINDA UNIVERSITY SCHOOL OF NURSING
LEARNING ASSISTANCE PROGRAM
Summary of Exam Techniques
For Multiple Choice Questions

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A. Be Sure You Know What The Question is Asking!

- Read question carefully
- Underline important words
- Try to answer the question yourself before you look at the answer options
- Create a pool of possible answers (jot down key word(s) for each)

B. Consider Each Option Carefully

- Compare answer options given on exam with your own pool of possible answers
- Reread the question carefully
- Read the answer options carefully underlining key words
- Read the stem before each option writing true, false or ? beside each option

C. Use Your Knowledge When Choosing The Best Answer

- Choose your answer based on what you have learned in the course
  Example: Choose answer marked true above one marked?
- Do not choose an answer just because "it sounds good" if you have not heard of it before (in lecture or textbook)--it may be a cleverly worded distraction

D. Use Your Time Wisely

- Do easy questions first
- Moderately difficult questions next
- Leave most difficult questions until last
- Do not spend too long on any one question
- Do not be in a hurry to leave. Check your paper to be sure you have answered all questions
- Check carefully for clerical errors (marking wrong answer by mistake)
- Read each stem with the answer you have marked to be sure it makes sense

E. If You Do Not Understand The Question or Answer Option Ask For Help

- Ask the instructor to clarify what is not clear
- Ask the instructor if he will please "restate" a confusing question or option

F. Do Not Change Your Answers

- The only time you should change an answer is when you know why the first answer is wrong and/or why the second answer is right
- Never change an answer just because you feel uncertain

G. Practice Good Exam Techniques

- Use steps A, B, and C on every quiz or exam question
- Practice these techniques on old exams or on review questions before every exam you take
- If you are answering an essay question write an outline of the points you wish to include before writing your answer

If we can be of any help, please call:

Learning Assistance Program
Loma Linda University
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Room 127
Phone 824-4360 Ext 5494

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LOMA LINDA UNIVERSITY SCHOOL OF NURSING
LEARNING ASSISTANCE PROGRAM

EXAM ANALYSIS

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PROBLEM AREA	POTENTIALLY RELATED FACTORS	ASSESSMENT NEEDED	POSSIBLE INTERVENTIONS
I. Lack of Knowledge of Subject Matter	Poor retention of information	Determine whether or not student spends adequate time in study and/or review.	- Help student set up schedule using the PLRS study cycle - Set up a pre-exam schedule - Encourage student to make flash cards, summary sheets, etc. for drilling on important information
	Inadequate lecture notes	Determine whether information needed to answer the questions the student missed was given in lecture or taken from textbook. If it were given in lecture, check to see if the student has it in his notes. Is the information adequately recorded?	- Set up note-sharing with a peer tutor - Encourage student to share notes with others in a study group - Encourage student to get help in improving his note-taking skills - Encourage student to record lectures with a tape recorder and then complete notes from the tape after class
	Failure to understand concept well enough to apply knowledge correctly	Attempt to pinpoint what the student does not understand.	- Encourage student to study with the goal of understanding--not memorizing - Encourage student to compare textbook with other sources in order to clarify concept - Encourage student to seek help from instructors - Set up tutoring for the student with goal of discussing important concepts including possible applications - Encourage student to discuss concepts with other students in a study group setting

PROBLEM AREA	POTENTIALLY RELATED FACTORS	ASSESSMENT NEEDED	POSSIBLE INTERVENTIONS
II. Inadequate English Language Skills:			
Reading Comprehension	Failure to understand the meaning of the question(s) and/or the answer option(s)	Ask the student to restate or explain the question or option.	- Encourage the student to seek clarification from the instructor to be sure the question or option is understood correctly. - Encourage student to seek help with reading comprehension skills.
Vocabulary	Inadequate vocabulary to understand the meaning of question(s) or answer option(s)	Ask student to explain the meaning of the word(s) causing the difficulty. Determine whether difficulty is with medical or general vocabulary terms.	- Encourage student to look up at unfamiliar words in a dictionary when he is studying. - Encourage student to make a list of all new vocabulary encountered. - Encourage student to make flash cards of unfamiliar words with their meanings. Drill with these flash cards. Use these words in sentences. Practise pronouncing these words. - Encourage student to work on vocabulary programs. Several Levels of general vocabulary and medical programs are available in L.A.P.
Reading Speed	Lack of time to complete all items on examination(s) or unwise use of time.	Determine whether or not student answered all items. Determine whether or not items left undone were unfinished due to lack of time.	- Encourage student to do easy questions first. - Encourage student not to spend too long on any one item. - Discuss with instructor(s) whether or not it is possible for ESL students to have extra time to complete exam. - Encourage student to get help to improve reading speed.

PROBLEM AREA	POTENTIALLY RELATED FACTORS	ASSESSMENT NEEDED	POSSIBLE INTERVENTIONS
III. Exam Panic:			
Unable to concentrate during the exam	Does not read questions or answer options carefully enough	Determine whether or not the student is able to answer the questions correctly during the exam analysis (when student is not under the stress of taking an exam).	- Practice good exam techniques with student so he has a specific routine to follow in answering <u>every</u> exam question. A. Concentrate on what the question is asking: -underline key words. -jot down own answer before looking at answer options. B. Consider each option carefully: -underline key words. -mark each option as true, false or ? C. Choose answer using information you have learned during the course. - Practice using above techniques--A,B,C before each exam on quizzes, old exams, review questions, etc.
Student gets "easy" questions wrong	Student does not bother to use the steps involved in good exam techniques on "easy" questions.		- Encourage student to use these techniques on <u>every</u> question--not just those that are difficult.
Mental Block--<u>can't remember</u> what has been learned when taking exam	Did not learn material thoroughly enough. Lacks confidence in ability to well on exam. Unable to break exam panic cycle (can't relax)		- Overlearning may help. - Drill with flash cards on important concepts and related materials. This will build confidence in knowledge of material. - Practice relaxation techniques frequently so student can use them to break panic cycle during exam. - If problem persists refer student for psychological counseling.

PROBLEM AREA	POTENTIALLY RELATED FACTORS	ASSESSMENT NEEDED	POSSIBLE INTERVENTIONS
IV. Poor Exam Skills:		Have student answer question without looking at his former answer or the correct answer. Then ask student why he chose the wrong answer on the exam.	Teach student to: - Read each question carefully. - Underline key words. - Attempt to answer question (jot down "pool of answers" before looking at answer options). This insures that student understands what is being asked.
Did not know what question asked	Read question carelessly or too quickly. Failed to note key words.		
Did not consider each option carefully			- Underline key words in options. - Compare your "pool" of possible answers with answer options on exam. - Mark each option as true, false, or ?
	Chose attractively worded distractor		- Choose answer you have marked true above one marked ? - Use knowledge you have learned in course--do not choose something unfamiliar just because it "sounds good."
Changed answer from right to wrong		Note how many answers student changed. Calculate the percentage of questions changed that the student got wrong.	- Never change an answer unless you know why the first choice was wrong and/or why the second choice is right. Never change an answer just because of uncertainty or lack of confidence in your knowledge. First impressions are usually right. Later on you may "read too much into the question."
	"Read too much into the question."		
Difficulty with "except" questions.		Note whether or not student has frequent difficulty with "except" questions.	- Disregard the word "except." - Mark each option as true, false or ? - Choose answer that is different from the others. - Re-read stem (including "except") with answer option chosen to be sure your answer makes sense.

PROBLEM AREA	POTENTIALLY RELATED FACTORS	ASSESSMENT NEEDED	POSSIBLE INTERVENTIONS
IV. Poor Exam Skills:			Teach student to:
Failure to use time wisely -did not answer all of questions -failed to answer question even though student knew correct answer	Spent too long on difficult question(s). Did not have enough time left to answer all of "easy" questions.		- Answer easiest questions first (in order to build up confidence and get most credit for what you know). - Answer moderately difficult questions next. - Leave most difficult questions until last.
Did not answer question adequately		Determine whether or not student knew other key factors that he failed to include in his answer.	- Give more time to questions worth more points. - Make outline (include all key points) before writing answer for an essay question.
"Forgot" to answer question(s).	Carelessness or lack of concentration		- Do not be in a hurry to leave. - Take time to recheck paper to be sure all questions have been answered.
Marked wrong answer "by mistake." (Punched answer card wrong)	Carelessness or lack of concentration		- Take time to check paper for clerical errors. - Re-read each question with the option you have chosen to be sure you have marked the answer you intended.

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